

Smarter Safer Homes for older Australians: providing feasible, virtual in-home care

Stephen Winn¹, Leanne Nisbet²

¹University of Southern Queensland, QLD; ²PhD student, The University of Queensland, QLD

The Smarter Safer Homes Project has been undertaken with a small cohort of older Australians living within independent residential units at an aged care facility in rural New South Wales. The project, which was a collaborative effort between researchers from the University of New England and CSIRO e-Health, aimed to improve the quality of life of participants, by investigating the way that e-Health technology could be used to actively support healthy ageing in regional rural Australia. Smarter Safer Homes' researchers examined the use of remote in-home sensors, which included acoustic sensors, reed switches and videoconference accessibility via tablet devices to support older Australians who wished to remain living independently, within the familiar environment of their homes. Digital links via high-speed broadband connection were set up to download data from participants and their environment to their medical and health care specialists, but to also connect participants to friends, online social networking groups, family and others, providing a practical solution to the sociological issues of loneliness or depression of aged Australians as a result of their remote location or physical isolation.

Researchers associated with the project explored the myths that prevailed around older Australians in general, as being 'digitally disengaged' or at best, 'digital immigrants' reluctant to incorporate sophisticated 21st century technology into their everyday lives, and the culture of utilising technology by medical and health professionals. This project explored associated academic research and scholarly literature regarding the delivery of technology to aged citizens and found a surprising lack of positive 'success stories', and furthermore suggestions that remote health sensing raises a number of issues relating to an individual's privacy. The Smarter Safer Homes Project suggests that the major factors underpinning the positive, successful engagement of older Australians with remote health monitoring and quality of life focused digital technology, are: reliable internet connectivity, secure transfer and IT server availability, excellent communication skills on behalf of health care professionals and third party providers, a willingness by health professionals to utilise a virtual delivery, a continuously evolving constructivist perspective of older Australians within the context of their community—and the practical application of flexible, situation-appropriate, change management principles. Fundamentally, the impact of removing people from familiar surroundings has a negative impact on Quality of Life and by its association, Family Quality of Life. There is potential benefit in utilising a range of low cost technologies that could potentially have a major positive impact on the health and wellbeing of older Australians.